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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/686,785 | 10/17/2003 | Ui-yol Kim | 1793.1045 | 7724 |

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EXAMINER

PATEL, GAUTAM

| ART UNIT | PAPER NUMBER |
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2627

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/686,785

Applicant(s)

KIM ET AL.

Examiner

Gautam R. Patel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 22-24 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 25 and 27-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/25/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-29 are pending for the examination.

Election/Restriction

2. Claims 22-24 and 26 stand withdrawn without traverse. Claims 1-21, 25 and 27-29 remains for examination.

Claims 22-24 and 25 are withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b) as being drawn to a non-elected program conversion method. Election was made without traverse in Paper dated 7/21/06. Since no traverse was claimed claims are withdrawn without traverse.

NOTE: It seems typographical error was made during election of claims. Since claims 1-1, 25 and 27-29 were elected. It is assumed that Applicants intended to elect claims 1-21, 25 and 27-29. Action on claims 1-21 25 and 27-29 follows.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

Claim Objection

4. Claims 25 & 27 are objected to under 37 CFR 1.75 as being an exact duplicate of claim 11. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 U.S.C. § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-21, 25 and 27-29 are rejected under 35 U.S.C. § 102(e) as being anticipated by Oohchida et al., US. patent 6,584,060 (hereafter Oohchida).

As to claim 1, Oohchida discloses the invention as claimed an optical pickup [see Figs. 1, 6-7] including a light source, a grating, a reflecting member, a monitoring photodetector, an optical path changer, an objective lens and a signal detecting photodetector, comprising:

a light source [fig. 7, unit 11] which emits light;

a grating [fig. 7, unit 56] which separates a portion of the light emitted from the light source;

a reflecting member [fig. 7, unit 57] which reflects another portion of the light emitted from the light source;

a monitoring photodetector [fig. 7, unit 41A] disposed on a traveling path of the light reflected from the reflecting member and which measures the reflected light;

an optical path changer [fig. 7, unit 141] which changes an optical path of the light separated by the grating;

an objective lens [fig. 1, unit 21] which condenses the light the optical path of which is changed onto a disc [fig. 1, unit 101] [col. 8, unit 57-65]; and

a signal detecting photodetector [fig. 7, unit 41A] which receives the light reflected from the disc [C 15:L 35 to C 16:L 20].

NOTE: Unit 41A performs both functions. They are integrated together.

6. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Oohchida:

the light source is a laser diode [C8:L 57-65].

7. The aforementioned claim 3, recites the following elements, inter alia, disclosed in Oohchida:

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the grating has an effective aperture through which the portion of the light which is separated passes, wherein any portion of the light traveling outside of the effective aperture is ineffective light, and wherein the reflecting member is disposed on an optical path of at least a portion of the ineffective light and reflects the least a portion of the ineffective light [fig. 7B; and C 15:L 35 to C 16:L 20].

8. The aforementioned claim 4, recites the following elements, inter alia, disclosed in Oohchida:

the reflecting member is disposed around the grating [fig. 7B; and C 15:L 35 to C 16:L 20].

9. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Oohchida:

5. The optical pickup of claim 1, wherein the reflective member is a mirror.

10. The aforementioned claim 6, recites the following elements, inter alia, disclosed in Oohchida:

the reflecting member is disposed only in a portion of a peripheral portion of the grating [fig. 7B; and C 15:L 35 to C 16:L 20].

11. The aforementioned claim 7, recites the following elements, inter alia, disclosed in Oohchida:

the optical path changer is one of a beam splitter [fig. 7, unit 141] which reflects or transmits incident light by a ratio according to a reflective coating of the beam splitter and a polarized beam splitter which reflects or transmits incident light according to a polarization direction of the incident light [C 15:L 35 to C 16:L 20].

12. The aforementioned claim 8, recites the following elements, inter alia, disclosed in Oohchida:

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the signal detecting photodetector detects a focusing servo signal and a tracking servo signal [inherently done without which system will not work] from the received reflected light [C 15:L 35 to C 16:L 20].

13. The aforementioned claim 9, recites the following elements, inter alia, disclosed in Oohchida:

a collimating lens [fig. 7, unit 23] which is disposed on an optical path between the optical path changer and the objective lens and converts incident thereon light into parallel light [C 15:L 35 to C 16:L 20].

14. The aforementioned claim 10, recites the following elements, inter alia, disclosed in Oohchida:

it is determined whether a power of the light measured by the monitoring photodetector is lower or higher than a reference value, and when a power of the light measured by the monitoring photodetector is one of lower and higher than the reference value, the power of the light source is controlled so that the power of the light measured by the monitoring photodetector is the reference value [C 15:L 35 to C 16:L 20].

NOTE: In this claims Applicants are merely claiming how a power monitoring is done. Oohchida does that.

15. The aforementioned claim 11, recites the following elements, inter alia, disclosed in Oohchida:

focusing servo and tracking servo operations are performed using a light signal output by the signal detecting photodetector based at least partially on light reflected from the disc [C 15:L 35 to C 16:L 20].

16. As to claim 12, it is rejected for the similar reasons set forth in the rejection of claims 1 & 3, above. [see fig. 6].

17. The aforementioned claim 13, recites the following elements, inter alia, disclosed in Oohchida:

the monitoring photodetector [fig. 6, unit 35] is adjacent to an outer sidewall of the grating.

18. As to claims 14, 16-21, 25 and 27, they are claims corresponding to claims 2, 9, 7-8, 6, 10-11, 11 and 11 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 2, 9, 7-8, 6, 10-11, 11 and 11 respectively, above.

19. The aforementioned claim 15, recites the following elements, inter alia, disclosed in Oohchida:

an optical path changer [fig. 6, unit 11] disposed between the grating and the objective lens and changes an optical path of light incident thereon [C 15:L 35 to C 16:L 20].

20. As to claim 28, it is rejected for the similar reasons set forth in the rejection of claims 1, above.

21. As to claim 29, it is rejected for the similar reasons set forth in the rejection of claims 1, above.

Other prior art cited

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Chen et al. (US. Patent 6850360).
- b) Tsunoyama et al. (US. patent 4690558).
- c) Matsui (US. patent 5066129).

Contact information

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



**GAUTAM R. PATEL
PRIMARY EXAMINER**

Gautam R. Patel
Primary Examiner
Group Art Unit 2627

August 17, 2006